

REMARKS

Claims 1-9 are pending in this application. By this Amendment, claim 1 is amended and claims 8 and 9 are added. Support for the amendments to claim 1 and new claims 8 and 9 can be found in paragraphs [0015] and [0032]-[0034] for example.

The courtesies extended to Applicants' representative by Examiners Kwon and Ryan at the interview held September 22, 2009 are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below, which constitute Applicants' record of the interview.

Claims 1, 2 and 7-9 read on the elected species. Upon the allowance of claim 1, rejoinder of claims 3-6 is respectfully requested.

The Office Action rejects claims 1, 2 and 7 under 35 U.S.C. §103(a) over U.S. Patent Application Publication No. 2004/0265675 (Woodcock) in view of U.S. Patent Application Publication No. 2005/0084731 (Nishimura). This rejection is respectfully traversed.

Claim 1 recites a collector plate that is made such that current density of the other regions is smaller than current density of the neighboring region. Woodcock fails to disclose this feature because Woodcock seeks a uniform current density as discussed in paragraph [0019], for example. Nishimura fails to overcome the deficiencies of Woodcock.

As discussed during the personal interview, Woodcock also fails to teach that the collector plate is made such that a heat capacity per unit area thereof is different for a neighboring region that is near to a portion where the output terminal is connected as compared to other regions of the collector plate, and the heat capacity per unit area of the other regions is smaller than the heat capacity per unit area of the neighboring region, as recited in independent claim 1.

With respect to Woodcock, the reference relates to a fuel cell with a stack of field flow plates. The Office Action asserts that paragraph [0019] of Woodcock teaches that

"[e]ach flow field path... has a width, depth and length such that a flow rate of reactant in each flow field path is proportional to an area serviced by each flow field path so that an electric current density is uniform throughout the flow field plate." In so asserting, the Office Action concludes that the width, depth and length of the flow field path are result effective variables.

Applicants respectfully disagree. As discussed above, Woodcock teaches that characteristics such as width, depth and length may be altered to obtain various properties. However, in the presently claimed features, the collector plate is directed to specific features (i.e. the heat capacity per unit area of various regions) which yield a particular advantageous result, as is discussed throughout the present specification. While Woodcock at Fig. 3B illustrates a cross section of a flow field plate with varying channel sizes, Woodcock does not teach the above recited features of independent claim 1 because Woodcock at least fails to teach how the different channel sizes relate to a portion where the output terminal is connected. Woodcock merely shows a flow field plate with channels of varying sizes.

Furthermore, Applicants submit that the features of the presently claimed invention are not directed to a result effective variable that is merely being optimized. The presently claimed features are directed to a specific arrangement of the collector plate, in order to achieve a specific result. Thus, the teachings of Woodcock would not lead one skilled in the art to arrive at the presently claimed features, and particularly the claimed relative heat capacity per unit area and their attendant advantages.

Woodcock also fails to provide an enabling disclosure even suggestive of the specifically claimed heat capacity arrangement. Woodcock at paragraph [0019] does not disclose sufficient guideposts for a skilled artisan, through only routine experimentation, to arrive at these features. This further underscores the failure of the Woodcock disclosure to teach or render obvious the claimed feature with sufficient specificity.

Claims 2 and 7 depend from claim 1. Because the applied references fail to anticipate or render obvious the features recited in independent claim 1, dependent claims 2 and 7 are patentable for at least the reasons that claim 1 is patentable, as well as for the additional features they recite.

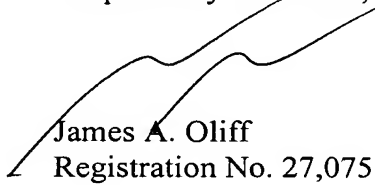
Accordingly, withdrawal of the rejection is respectfully requested.

As agreed during the personal interview, Woodcock and Nishimura fail to suggest the additional features of claims 8 and 9.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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